

C54

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/039483 A3

- (51) International Patent Classification⁷: **A61K 35/78**
- (21) International Application Number:
PCT/US2004/016043
- (22) International Filing Date: 21 May 2004 (21.05.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- | | | |
|------------|------------------------------|----|
| 60/472,460 | 22 May 2003 (22.05.2003) | US |
| 10/464,834 | 18 June 2003 (18.06.2003) | US |
| 10/464,410 | 18 June 2003 (18.06.2003) | US |
| 10/689,856 | 20 October 2003 (20.10.2003) | US |
| 10/774,048 | 4 February 2004 (04.02.2004) | US |
- (71) Applicant (for all designated States except US):
METAPROTEOMICS, LLC [US/US]; 100 Avenida La Pata, San Clemente, CA 92673 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BABUSH, John, G.** [US/US]; 508 White Church Road, Brooktondale, NY 14817 (US). **TRIPP, Matthew, L.** [US/US]; 4202 71st Avenue Court NW, Gig Harbor, WA 98335 (US). **HOWELL, Terrence** [US/US]; 36 Lake Shore Road, Lansing, NY 14882 (US). **BLAND, Jeffrey, S.** [US/US]; 957 11th Lane, Fox Island, WA 98333 (US). **DARLAND, Gary** [US/US]; 1718 Clorindi Circle NW, Gig Harbor, WA 98335 (US). **LERMAN, Robert** [US/US]; 6918 Cascade Avenue, Gig Harbor, WA 98335 (US). **LUKACZER, Daniel, O.** [US/US]; 5820 98th Avenue NW, Gig Harbor, WA 98335 (US).
- (74) Agents: **CADENA, Deborah, L. et al.; McDermott, Will & Emery**, 4370 La Jolla Village Drive, Suite 700, San Diego, CA 92122 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
29 September 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTI-INFLAMMATORY PHARMACEUTICAL COMPOSITIONS FOR REDUCING INFLAMMATION AND THE TREATMENT OR PREVENTION OF GASTRIC TOXICITY

(57) Abstract: The invention provides hops (*Humulus lupulus*) extracts or derivatives thereof for use in treating a patient prophylactically and/or therapeutically for ulcerogenic-type disorders of the stomach and/or intestines. The ulcerogenic disorders can be of the type chemically induced, environmentally-induced, infection-induced, and/or stress-induced. The invention also provides a pharmaceutical composition comprising an active amount of hops extracts or derivatives thereof, in combination with an analgesic compound and/or an anti-inflammatory compound. The invention further provides for use of hops extracts or derivatives thereof, significantly reducing and/or therapeutically treating ulcerogenic-type disorders of the stomach and/or intestines.



WO 2005/039483 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/16043

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 35/78

US CL : 424/725

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/725

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST, STN

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,968,539 A (BEERSE et al.) 19 October 1999(19.10.1999), see column 7.	1-36

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"A" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

15 June 2005 (15.06.2005)

Date of mailing of the international search report

27 JUL 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Michael V. Meller

Telephone No. (571) 272-1600